

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

Claim 1 (Currently amended): A broadcast network comprising:

- a) an optical transmitter for broadcasting a single optical signal to a plurality of end users at different locations;
- b) a branch point optically coupled to the optical transmitter, wherein the branch point includes a 1x2 element; first optical fiber cable that includes a plurality of N individual fibers; wherein the number N of individual fibers corresponds to the number of end users; and
- c) a first optical fiber cable that includes a plurality of N individual fibers optically coupled to a first output of the 1x2 element; wherein the number N of individual fibers corresponds to the number of end users; branch point where the individual fibers branch out to the individual users, wherein the branch point includes a tree of 1 x 2 splitters; and
- d) a second optical fiber cable that includes a plurality of N individual fibers optically coupled to a second output of the 1x2 element to provide route diversity in the broadcast network.

Claim 2 (Original): The broadcast network of claim 1 wherein the network is arranged as a logical star.

Claim 3 (Original): The broadcast network of claim 1 wherein the network is arranged as a physical bus.

Claim 4-7 (Canceled)

Claim 8 (Original): The broadcast network of claim 1 further comprising:

a central office, wherein the branch point is located in the central office.

Claim 9 (Original): The broadcast network of claim 1 wherein the branch point is located in the field.

Claim 10 (Canceled)

Claim 11 (Currently amended): The broadcast network of claim 1 further including:

[[d]] e) at least one optical receiver for receiving one of the individual fibers.

Claim 12 (Currently amended): The broadcast network of claim 1 further including:

[[d]] e) a plurality of optical receivers; wherein each receiver is coupled to a respective individual fiber in the first optical fiber cable and a respective individual fiber in the second optical fiber cable.

Claim 13 (Original): The broadcast network of claim 1 wherein the optical transmitter includes:

an optical source for providing an optical signal;

an optical modulator for receiving data signals, for receiving the optical signal, and for modulating the optical signal based on the data signals to generate a modulated optical signal.

Claim 14 (Original): The broadcast network of claim 13 wherein the optical transmitter further includes:

a multiplexer for receiving a plurality of data signals and based thereon for generated a multiplexed signal;

wherein the multiplexed signal is provided to the optical modulator.

Claim 15 (Previously presented): The broadcast network of claim 14 wherein the optical receiver includes:

a photodetector for receiving a modulated optical signal that includes data signals, for demodulating the modulated optical signal to recover the data signals.

Claim 16 (Original): The broadcast network of claim 15 wherein the optical receiver further includes:

a de-multiplexer for receiving a recovered multiplexed data signal and based thereon for generating the individual data signals.

Claim 17 (Original): The broadcast network of claim 1 wherein the optical transmitter transmits the signal on all the individual fibers.

Claim 18 (Currently amended): A method for broadcasting information through a broadcast network using a first multi-optical-fiber cable that includes a plurality of N individual optical fibers and a second multi-optical-fiber cable that includes a plurality of N individual optical fibers where N represents the number of users, the method comprising:

receiving a broadcast signal;

transmitting the broadcast signal through at least one of the first and second multi-optical-fiber cable cables; and

delivering the broadcast signal to a respective user through a dedicated individual optical fiber in the at least one multi-optical-fiber cable that was used to transmit the broadcast signal, wherein the broadcast signal is delivered to the respective user through a branch point including a tree of 1 × 2 splitters.

Claim 19 (Original): The method of claim 18 further comprising the steps of:

using an optical receiver to receive the signal.

Claim 20 (Currently amended): The method of claim 18 further comprising the steps of:

transmitting the same signal on all the individual fibers of the at least one multi-optical-fiber cable.